



The dCache to iRODS connection at SURFSara

About

Technical documentation about the dCache to iRODS version 4.x connection at SURFSara.

Modified: 07 Mar 2017

Synopsis

At SURFSara, dCache is linked to the iRODS server. dCache allows several access methods, including for instance: nfs 4.1, dcap and gridftp.

There are more than one ways to connect dCache to iRODS. In the past, EUDAT advocated using the dcap library/protocol. This is now obsolete. This document discusses the method of using the gridftp protocol, which is the EUDAT-recommended approach.

During the use of NFS 4.1 and dCache, SURFsara found that the dCache version used at that time was creating problems and did not function properly to use for production. We used the setup as described below. We only modified the universalMSSInterface.sh script to use gridftp instead of the nfs v4.1 link. The link is still there, but SURFsara only uses it for manual verification.

The dCache connection using the nfs v4.1 protocol

It is just a matter of mounting the nfs share as a client on the iRODS node.

```
rods$ mount
...
wname.bla.sara.nl:/pnfs on /pnfs type nfs
(rw,nfsvers=4,minorversion=1,addr=zzz.www.xx.yy,clientaddr=xyz.bla.x.zz)
```

It is added to the fstab as follows:

```
root# cat /etc/fstab
...
wname.bla.sara.nl:/pnfs      /pnfs    nfs      rw,nfsvers=4,minorversion=1  0 0
```

Now the dCache filesystem can be used as any filesystem.

Complete Compound resource setup and code and test examples

The complete Compound resource setup, code and test examples are described on: <https://github.com/cookie33/irods-compound-resource>

Support

Support for B2SAFE is available via the EUDAT ticketing system through the [webform](#).



If you have comments on this page, please submit them through the [EUDAT ticketing system](#).

Document Data

Version: 1.3

Authors:

Robert Verkerk, robert.verkerk@surfsara.nl

Editors:

Kostas Kavoussanakis, kavousan@epcc.ed.ac.uk

[Read more](#)